

IN CLAIMS

1. (currently amended) A payment system between a customer and a merchant that facilitates a private and secure payment transaction to the merchant comprising:

a. a central system; a portable wireless device; a merchant sales [display] terminal; and a terminal identification tag with a displayed terminal identification; the central system, the portable wireless device and the merchant terminal on a global computer network; ~~[wherein the portable wireless device is used to effect a private and secure payment transaction.]~~

b. the central system pre-stores customer bankcard data, merchant terminal identification data, and is interfaced to directly by the wireless device communicating the merchant terminal identification data and a payment amount, thus bypassing the merchant point of sale system from receiving the customer bank card data for a payment transaction, wherein the terminal identification is used by the central system to forward a payment authorization notification to the merchant sales terminal.

2. (original) The claim as in 1, wherein the portable wireless device, with an interface means, at time of payment transaction interfaces with a merchant system to receive the merchant display terminal identification and a payment amount.

3. (original) The claim as in 2, wherein the interface is via the portable wireless device having an infrared reading element receiving a wireless transmission of the terminal identification and a payment amount from a merchant system.

4. (original) The claim as in 2, wherein the interface is via the portable wireless device having a reading element reading the terminal identification from the terminal identification tag and a payment amount is entered into it.

5. (original) The claim as in 2, wherein on activating a payment function in the wireless device, a data record including at-least the terminal identification, the payment amount and a portable wireless device identification is transferred over the global network to the central system.

6. (original) The claim as in 5, wherein the central system assembles a payment transaction record, including customer pre-stored bank account data, and submits the payment transaction record to an automated clearing house (ACH), and receives a payment authorization record and subsequently the central system sends the payment authorization record to the merchant display terminal using the terminal identification as a uniform resource locator over the global computer network.

7. (original) The claim as in 6, the payment transaction record submitted to the ACH identifying a central system business entity bank for receiving payment amount from the ACH.

8. (original) The claim as in 7, wherein, the central system having a database relating the merchant terminal identification and a merchant bank account identification submitting a merchant payment record to the ACH for transferring an aggregate amount from a plurality of the payment transactions into a merchant bank account.

9. (original) The claim as in 5, wherein the wireless device identification is a combination of a pre-programmed identification code and a customer entered card personal identification number (CPIN).

10. (original) The claim as in 9, wherein the customer having a plurality of pre-stored account data in the central system, the customer entering the CPIN into the wireless device, identifying a specific account data to be used for a payment transaction.

11. (original) The claim as in 10, wherein the CPIN is a combination of personal identification code verifying the customer and an account identification code identifying an account.

12. (original) The claim as in 1, wherein the wireless device is a personal digital assistant adapted with a wireless modem, a reading element, and a payment function.

13. (original) The claim as in 1, wherein the wireless device is a cellular telephone adapted with a reading element and a payment function.

14. (original) The claim as in 1, wherein the wireless device is a cellular telephone with a keypad enabling manual entry of the terminal identification and adapted with a payment function.

15. (original) The claim as in 10, wherein, the central system maintaining a transaction database cataloging each payment transaction by a transaction reference, date, time, an authorization reference, payment amount, customer identification and merchant identification.

16. (original) The claim as in 15, further comprising a merchant refund terminal on the global computer network, wherein the merchant entering into the refund terminal a refund record, including at-least the payment transaction reference from a previous payment transaction, the merchant identification, a refund authorizing password, a refund amount, and sending the refund record to the central system.

17. (original) The claim as in 16, wherein, the central system receiving and verifying the elements of the refund record data with the transaction database, in particular verifying the refund amount is less than or equal to the payment amount, creating a refund record including the merchant account identification, refund amount and submitting to the ACH and receiving an approval, and forwarding that to the refund terminal.

18. (original) The claim as in 17, the refund terminal comprising: a printer capable of printing a refund record.

19. (original) The claim as in 18, further comprising: a customer interface with the central system enabling it to enter account data, account identification code, personal identification code and enabling it to create a search query to retrieve payment and refund transactions by type of transaction, transaction date, and merchant identification.

20. (original) The claim as in 18, further comprising: a merchant interface with the central system enabling it to enter merchant identification, merchant account identification, terminal identification and enabling it create a search query to retrieve payment and refund transactions by type of transaction, by date, terminal identification, and transaction reference number.

21. (currently amended) A payment system for a private and secure payment transactions between a customer and a merchant comprising:

a central system; a payment card with an encrypted card number that does not have customer personal data; a merchant card reader and a merchant sales [display] terminal; [wherein] the central system, the card reader, and the display terminal are on a global computer network, the payment card is swiped in the card reader, a card personal identification number (CPIN) is entered by the customer, the merchant terminal identification and a payment amount is entered into it by the merchant, a data record including at-least the foregoing data and the encrypted card number is sent by the card reader over the global network to the central system, the central system decrypts the payment card number and the CPIN to identify customer pre-stored bank card data, assembles a payment transaction record using bankcard data, submits the payment transaction record to an automated clearing house (ACH), and receives payment authorization record that is forwarded to the sales terminal, and wherein the payment card is used to effect a private and secure payment transaction.

22. currently deleted

23. currently deleted

24. (currently amended) The claim as in 21 [22], the central system having a
5 database having data on the terminal identification and the display terminal uniform
resource locator, sends payment authorization record to the merchant display terminal
using the uniform resource locator over the global computer network.

25. (currently amended) The claim as in 21 [23], the payment transaction record
10 submitted to the ACH identifies a central system business bank for receiving payment
amount from the ACH.

26. (currently amended) The claim as in 21 [23], the central system, having a
15 database with data on the merchant identification and a merchant bank account
identification, submitting a merchant payment record to the ACH for transferring an
aggregate amount from a plurality of the payment transactions into a merchant bank
account.

27. (original) The claim as in 26, wherein the encrypted card number embeds a
20 decryption algorithm reference, enabling the central system using a decryption
algorithm from a plurality of pre-stored algorithms to decipher the customer identification
number.

28. (original) The claim as in 26, wherein the encrypted card number and a bankcard
25 number have similar format characteristics being indistinguishable from each other.

29. (original) The claim as in 28, wherein the customer having a plurality of pre-
stored accounts in the central system, the customer entering the CPIN into the card
reader, wherein the CPIN is a combination of personal identification code verifying the
30 customer and an account identification code.

30 to 31 cancelled due to restriction requirement.

32. (currently amended) A payment system for private and secure payment transactions between a customer and a merchant comprising:

5 a central system; ~~[a portable wireless device; a payment card with an encrypted card number];~~ a standard bankcard; a merchant card reader; and a merchant sales [display] terminal ~~[with an identification tag];~~ the central system, ~~[the portable wireless device,]~~ the merchant ~~[wireless] card[,]~~ reader, and the display terminal independent of each other are on a global computer network, wherein the card reader is able to communicate card data directly to the central system without it being routed through the merchant computer system[;] ~~[wherein, at least one of the group including the portable wireless device, the payment card, and the bankcard, is selected by the customer to effect a payment transaction].~~

15 33. (currently amended) The claim as in 32, wherein the standard card is swiped in the card reader, a card personal identification number (CPIN) is entered into it by the customer, a merchant identification and a payment amount is entered into it by the merchant; and a data record including at-least the foregoing data and the bank card
20 number is transferred over the global network by the card reader to the central system.

34. (original) The claim as in 33, wherein the central system with the bank card number and the CPIN to identify pre-stored remainder bank card data and assembles a payment transaction record, submits the payment transaction record to an automated
25 clearance house and receives payment authorization record.

35. (original) The claim as in 34, the central system sends payment authorization record to the merchant display terminal using the terminal identification as a uniform resource locator over the global computer network.

36. (original) The claim as in 34, the payment transaction record submitted to the ACH identifies a central system business bank for receiving payment amount from the ACH.

37. (original) The claim as in 34, the central system, having a database between the terminal identification and a merchant bank account identification, submitting a merchant payment record to the ACH for transferring an aggregate amount from a plurality of the payment transactions into the merchant bank account.

38 to 40 cancelled due to restriction requirement.

41. (currently amended) A private and secure payment system between two parties comprising:

a. a central system; a portable wireless device belonging to a party A; the central system and the portable wireless device are on a global computer network; ~~[wherein the portable wireless device is used to effect a private and secure payment transaction to a party B];~~

b. a function in the wireless device that enables entry of, at time of payment transaction from party A to party B, a party B's identification that may include a coded number such as a telephone number, and a payment amount is entered into the wireless device, wherein the portable wireless device is used to effect a private and secure payment transaction to the party B.

c. on activating a payment function in the wireless device, a data record including at-least the party B's identification, the payment amount and a portable wireless device identification is transferred over the global network to the central system.

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45. (currently amended) The claim as in 41 [44], wherein the central system assembles a payment transaction record including at least the party A pre-stored bank account data, payment amount and identifies a central system business bank, submits the payment transaction record to an automated clearing house and receives a payment authorization record.

46. (original) The claim as in 45, wherein the central system having a database with party B's identification and a party B's bank account identification, assembles a payment transaction record, including at-least party B's pre-stored bank account data, payment amount and identifies the central system bank and submits the payment transaction record to an automated clearing house and receives a payment authorization record.

47. (original) The claim as in 46, the central system, having a database with party A's e-mail address and party B's e-mail addresses, sends a notification of the payment authorization to the party A and party B's e-mail addresses.

48. (currently amended) The claim as in 41 [43], wherein the wireless device identification is a combination of a pre-programmed identification code and a customer entered personal identification code.

49. (currently amended) The claim as in 41 [43], wherein the wireless device is a personal digital assistant adapted with a wireless modem.

50. (currently amended) The claim as in 41 [43], wherein the device is a cellular telephone.